

Notice of Allowability

Application No.

10/576,110

Examiner

David D. Le

Applicant(s)

SHIZUME, MASARU

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 04/18/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. This is the first Office action on the merits of Application No. 10/576,110, filed 18 April 2006. Claims 1-4 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:
 - A Copy of Foreign Priority Document, received on 04/18/06
 - Information Disclosure Statement, received on 04/18/06

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's attorney, Michael S. Huppert, on 03 January 2008.

The application has been amended as follows:

Abstract:

The abstract has been rewritten as followed:

--A controller serving as determination device determines whether or not a rising speed of the clutch pressure of the input clutch is less than a limit rising speed of the original pressure. A controller serving as original pressure control device adjusts the

original pressure such that a difference between the original pressure and the detected clutch pressure of the input clutch becomes a predetermined offset pressure when it is determined that the clutch pressure rising speed of the input clutch is less than the original pressure limit rising speed, and adjusts the original pressure such that the original pressure is raised at the original pressure limit rising speed when it is determined that the clutch pressure rising speed of the input clutch is equal to or higher than the original pressure limit rising speed.--

Allowable Subject Matter

4. Claims 1-4 are allowed.
5. The following is an examiner's statement of reasons for allowance:

Claim 1:

The prior art of record fails to show or render obvious a control device comprising an input clutch, an orifice, an input clutch pressure control means, a clutch pressure detection means, a determination means, and an original pressure control means, as recited in claim 1; specifically, wherein the determination means determines whether a rising speed of the clutch pressure of the input clutch is less than a limit rising speed of the original pressure; and, the original pressure control means adjusts the original pressure such that a difference between the original pressure and the detected clutch pressure of the input clutch becomes a predetermined offset pressure when it is determined that the clutch pressure rising speed of the input clutch is less than the original pressure limit rising speed, and adjusts the original pressure such that the original

pressure is raised at the original pressure limit rising speed when it is determined that the clutch pressure rising speed of the clutch is equal to or higher than the original pressure limit rising speed.

Claim 3:

The prior art of record fails to show or render obvious a control device comprising an input clutch, a brake means, a brake operating means, an orifice, an input clutch pressure control means, a clutch pressure detection means, a determination means, and an original pressure control means, as recited in claim 3; specifically, wherein the determination means determines whether a rising speed of the clutch pressure of the input clutch is less than a limit rising speed of the original pressure; and, the original pressure control means adjusts the original pressure such that the original pressure is raised at the original pressure limit rising speed when it is determined that the clutch pressure rising speed of the clutch is equal to or higher than the original pressure limit rising speed.

Claim 4:

The prior art of record fails to show or render obvious a control method for an input clutch applicable to a work vehicle, as recited in claim 4; specifically, wherein the method includes the steps of:

Determining whether a rising speed of the clutch pressure of the input clutch is less than a limit rising speed of the original pressure; and

Adjusting the original pressure such that a difference between the original pressure and the detected clutch pressure of the input clutch becomes a predetermined offset pressure, when it is determined that the clutch pressure rising speed of the input clutch is less than the original pressure limit rising speed, or

Adjusting the original pressure such that the original pressure is raised at the original pressure limit rising speed, when it is determined that the clutch pressure rising speed of the input clutch is equal to or higher than the original pressure limit rising speed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

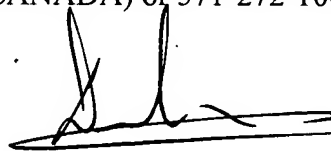
- Fukumoto et al. (U. S. Patent No. 6,692,409) teaches a hydraulic change speed system for a working vehicle, as shown in Figs. 2-3.
- Fukumoto et al. (U. S. Patent No. 6,955,628) teaches a hydraulic change speed system for a utility vehicle, as shown in Figs. 2-4.
- Hou (U. S. Patent No. 7,048,106) teaches a power take-off control system, as shown in Fig. 1.

- Takamura et al. (U. S. Patent No. 7,153,235) teaches a running control device for an industrial vehicle, as shown in Fig. 1

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David D. Le
Primary Examiner
Art Unit 3681
01/03/2008